Push Dose Nitro

PROCEDURE

STEPS

1. Monitor appropriately: full vital signs and continuous cardiac monitoring
2. Confirm a patent IV/IO line with appropriate fluid therapy
3. Draw 2 mL (400 mcg) of nitroglycerin from the 50 mg/250 cc D5W glass bottle into a 10 mL syringe
4. Connect the nitro syringe and a 10 mL saline flush with the transfer device
5. Transfer 8 mL of saline into the nitro syringe — you now have 400 mcg/10 mL
6. Mix well and label the syringe so it is not confused for a saline flush
7. Administer all 10 mL (400 mcg) slow IVP over 1 minute; repeat every 5 minutes as needed, just like sublingual

BEFORE YOU START

- Indications: congestive heart failure; cardiac chest pain when sublingual nitro is difficult
- Nitroglycerin: vasodilator — peripheral pooling reduces venous return/preload, relaxes arteries (afterload), dilates coronary arteries
- Patient closely monitored for developing hypotension; patent IV/IO and fluid therapy in place
- Glass bottle is single patient use only
- Contraindications: children less than 12 years of age; hypotension

KIT YOU NEED

- Nitroglycerin 50 mg/250 cc D5W glass bottle
- 10 mL saline flush, draw needle, 10 mL syringe, transfer device

IF IT GOES WRONG

- Side effects: headache, dizziness, hypotension, nausea/vomiting, tachycardia
- Constantly monitor blood pressure; IV must be established before administration
- Use caution in inferior/posterior wall MI; caution with erectile dysfunction drugs
- Protect the drug from light

Take Home Message:

Mix it exactly — 2 mL of nitro plus 8 mL of saline makes 400 mcg/10 mL — label the syringe, give it over a minute, and watch the pressure.